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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/722,678   | 11/28/2003  | Hirotoshi Ishida     | 245084US0RE         | 9589             |
| 22850  | 7590        | 09/12/2006           | EXAMINER            |                  |
| C. IRVIN MCCLELLAND<br>OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      | TRAN LIEN, THUY     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1761                |                  |

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                          |                  |
|------------------------------|--------------------------|------------------|
| <b>Office Action Summary</b> | Application No.          | Applicant(s)     |
|                              | 10/722,678, 90/007164    | ISHIDA ET AL.    |
|                              | Examiner<br>Lien T. Tran | Art Unit<br>1761 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 July 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-6 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-6 and 10-16 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \*    c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. 09/707,953.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

The amendment filed Feb. 4,2005 proposes amendments to 1,11,13,15 that do not comply with 37 CFR 1.173(b), which sets forth the manner of making amendments in reissue applications. A supplemental paper correctly amending the reissue application is required.

An amendment paper must include the entire text of each claim being changed. For any claim changed by the amendment paper, a parenthetical expression "amended", "twice amended" etc.. should follow the claim number. The matter to be omitted must be enclosed in brackets and the matter to be added must be underlined. All amendments must be relative to the patent.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is indefinite as to the content of the claim because claim 12 is amended in the reissue application; however, claim 12 of the reexamination is not amended.

Claim 11 is rejected under 35 U.S.C. 251 as being improperly broadened in a reissue application made and sworn to by the assignee and not the patentee. A claim is broader in scope than the original claims if it contains within its scope any conceivable product or process which would have infringed the original patent. A claim is broadened if it is broader in any one respect even though it may be narrower in other respects.

The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. The

oath/declaration fails to specifically identify the error. Stating that claim 1 as issued was too broad is not sufficient. See 37 CFR 1.175(a)(1) and MPEP § 1414.

Claims 1, 3-6, 10-16 are rejected as being based upon a defective reissue oath and declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the oath is set forth in the discussion above in this Office action.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-6, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al ( US 2002/0037350A1) in view of Wakamatsu et al. ( 4835301)

Ishii et al disclose a sweetener composition comprising DMB-APM which is known as neotame and aspartame (APM). The amount of DMB-APM is between .1-35% by weight of the total amount of DMB-APM. The ratios of DMB-APM are in the range of 1:9 to 9:1. The sweetener composition can be in the form of a powdery

mixture comprising DMB-APM together with APM. The mixture can contain diluent or bulking agents such as sugar alcohol, dietary fiber, sucrose, glucose and the like. The composition is used into various foods and drinks including carbonated and non-carbonated beverages. Test Samples 3,4 shows several carbonated cola solutions containing DMB-APM and APM composition. Example 2 shows the preparation of cola base solution in which the composition is added potable liquid. ( see paragraphs 0009,0010, 0014, 0013, 0019).

Ishii et al do not disclose the DMB-APM is a C-type crystal, the X-ray diffraction peaks and the water content.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and has good flow and storage stability. Type II differs from type I in the moisture content is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5,1.8 etc.. ( see examples 2-13 on column 3 and col. 1 lines 10-15)

Since Ishii et al disclose the amount of neotame is .1-35%, it is obvious the amount of aspartame is 65-99.9% which falls within the range claimed. It would have obvious to one skilled in the art to further dry the neotame to obtain crystal with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. Since the composition

is the same claimed, it is obvious the improvement in dissolution is obtained when the composition is used in a liquid.

Claims 1, 3-6, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. in view of Wakamatsu et al (4835301)

Anderson et al. teach synergistic combinations of sweeteners including d-tagatose with binary sweetener mixtures select from a group including Aspartame and Neotame. The ratio of D-tagatose to the other sweeteners is 1:5, and for a beverage formulation Neotame is preferred.

Anderson et al. are silent in teaching a particular level of powdered Aspartame, the neotame is a C-type crystal, the X-ray diffraction peaks and the water content of the neotame.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and has good flow and storage stability. Type II differs from type I in the moisture content is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. ( see examples 2-13 on column 3 and col. 1 lines 10-15)

It would have been obvious to one skilled in the art to determine the amount of aspartame that would give the optimum degree of sweetness, flavor, taste to the product in which the composition is used in. Such determination can readily be determined through routine experimentation with various amounts to determine the most optimum ones. It would have obvious to one skilled in the art to further dry the neotame to obtain crystals with lower moisture content as taught by Wakamatsu et al to

obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. Since the composition is the same claimed, it is obvious the improvement in dissolution is obtained when the composition is used in a liquid.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,3-6, 10-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 09/355980 in view of Wakamatsu et al.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are directed at sweetener composition

comprising DMB-APM and Aspartame wherein the amount of aspartame in the copending case is in amount of 65-99.9%. The copending application does not disclose the DMB-APM as C-crystal.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and have good flow and storage stability. Type II differs from type I in the moisture content and is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. ( see examples 2-13 on column 3 and col. 1 lines 10-15)

It would have obvious to one skilled in the art to further dry the neotame to obtain crystals with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. It would also have been obvious to use powdered form of the sweeteners when a granular composition is made.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Claude et al disclose a method of preparing a compound derived from aspartame, useful as a sweetening agent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday, Wednesday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cano Milton can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 28, 2006

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